

## **State Water Project Quarterly Business Report January to March 2008**

### **◆ Water Quality Data is from the Water Data Library (Grab Samples)**

Water quality around the State Water Project ranged from relatively degraded in the North Bay Aqueduct due to high organic carbon levels to excellent at the terminus station of the California Aqueduct due to low to moderate levels of salinity and organic carbon.

Total Dissolved Solids (TDS) in the California Aqueduct ranged from 267 to 370 mg/L except at the terminus station, Devil Canyon After bay, in which TDS (in two samples) varied slightly around 271 mg/L (see table below). TDS in outflows from Lake Del Valle to the South Bay Aqueduct were lower and ranged between 200 and 216 mg/L. TDS in the North Bay Aqueduct varied narrowly between 287 and 319 mg/L.

Bromide in the California Aqueduct ranged between 0.16 and 0.36 mg/L – levels were least variable at Devil Canyon After bay with a range of 0.24 to 0.26 mg/L. Similar levels were detected in the South Bay Aqueduct with the exception of Lake Del Valle outflows, which exhibited very low bromide levels of 0.04-0.05 mg/L. The same low levels were detected in the North Bay Aqueduct.

DOC in the California Aqueduct was characteristically elevated for January-March with a range of 4.3 to 6.9 mg/L at Banks Pumping Plant and Check 13. Further south at Check 41 and Devil Canyon After bay, levels declined to between 1.4 and 4 mg/L due, in part, to groundwater turn-ins. DOC around the South Bay Aqueduct ranged from 4.3 to 6.6 mg/L. The high DOC levels detected in the North Bay Aqueduct (6.6 to 9.8 mg/L) are typically associated with rainfall runoff from the watershed upstream of Barker Slough Pumping Plant.

The taste and odor compounds MIB and geosmin in the California Aqueduct and South Bay Aqueduct were undetectable to low (<1 to 5 ng/L).

Groundwater turn-ins to the California Aqueduct from Arvin-Edison Water Storage District, Kern Water Bank Canal, Cross Valley Canal, and Semitropic Water Storage District totaled 102,730 af during the first quarter.

## Constituents-of-Concern in the State Water Project

			TDS	Bromide	DOC	MIB/Geosmin	
			(mg/L)	(mg/L)	(mg/L)	(ng/L)	
				Goals			
SWP Facility	Station	Month, 2008	440 <sup>a</sup>	0.05 <sup>b</sup>	3.0 <sup>b</sup>	7 to 10?	
California Aqueduct	Banks Pumping Plant	January	360	0.36	4.5	<1 to 3	
		February	267	0.16	6.5	<1 to 5	
		March	359	0.23	5.5	<1 to 2	
		Check 13	January	370	0.35	4.3	1 to 5
		February	296	0.19	6.9	<1 to 3	
		March	298	0.23	4.4	<1	
		Check 41	January	306	0.29	2.3	
		February	340	0.32	2.8		
		March	268	0.18	2.2		
		Devil Canyon Afterbay	January	272	0.26	1.7	
		February	271	0.24	2.8		
		March		0.24	4		
	South Bay Aqueduct	Del Valle Check 7	January	359	0.36	4.3	<1 to 3
			February	262	0.16	6.6	<1 to 2
			March	310	0.21	5.9	<1 to 2
Lake Del Valle (Outlet)			January				
		February	216	0.05	4.4	<1	
		March	200	0.04	4.5	<1 to 1	
North Bay Aqueduct		Barker Slough Pumping Plant	January	319	0.07	8.5	
	February	287	0.06	9.8			
	March	305	0.07	6.6			

a: Article 19 Objective, Monthly Average

b: California-Bay Delta Authority Target

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